

Comments for Draft Revisions *(Not Applicable to Directives; Refer to Directive Management Officer for Directive Comment Format)*

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Comments Submitted By: Tom Knott, Cabin Safety DER

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#	Document Name	Page Number	Paragraph Number	Referenced Text	Comment/Rationale or Question	Proposed Resolution	Comment Type (Conceptual, Editorial, or Format)	Disposition/Response to Comment
1	Approval of Modified Seating Systems Initially Approved Under a Technical Standard Order	1	1.2	"However, if you use the means described in this AC, you must follow it in all important respects."	This wording is very good, and not as restrictive as "you must use this AC in its entirety" as on past AC's. This will allow for flexibility as future developments warrant.	None; please consider using this as the standard wording on other AC's	Conceptual	Noted. Comment does not need any further resolution.
2	Approval of Modified Seating Systems Initially Approved Under a Technical Standard Order	1	3	"cancels AC 21-25,"	While current practice is to omit the revision level (to avoid confusion as external references evolve), it would be helpful in this context.	"cancels AC 21-25A,"	Editorial	Accepted. Made the requested change.
3	Approval of Modified Seating Systems Initially Approved Under a Technical Standard Order	2	6	"14 CFR part 45, § 45.15."	This CFR is listed but the topic of Marking is not discussed in the document. Section 5.a.(6) on page 4 of AC 21-25A was very helpful. While obvious to some, "what to do" about marking/data plate requirements is one area of potential confusion out in the field. The previous revision was pretty clear, and not including Marking is serious omission (in my opinion).	Add a section derived from 5.a.(6) on page 4 of AC 21-25A	Editorial	Accepted. This section was removed because it is discussed in AC 21-46. The background section of this document was updated to make it clear that this AC is intended to be a supplement to the guidance contained in AC 21-46 and AC 21-50. However, we did add some seat specific guidance for marking in section 8.2.4.
4	Approval of Modified Seating Systems Initially Approved Under a Technical Standard Order	9	8.2.3	"The TSO IIL does not ensure compliance to all of the applicable aircraft installation airworthiness requirements."	Very well stated. This will help out in the field. Believe it or not, there are some who still think a TSO is an installation approval and worse yet, others think the installer doesn't need any data besides the IIL.	None, very well stated.	Conceptual	Noted. Comment does not need any further resolution.

Comments Submitted By:		Charles L. Daniel Jr						
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#	Document Name	Page Number	Paragraph Number	Referenced Text	Comment/Rationale or Question	Proposed Resolution	Comment Type (Conceptual, Editorial, or Format)	Disposition/Response to Comment
1	Approval of Modified Seating Systems Initially Approved under a Technical Standard Order	7	8.2.1.2.1	First sentence of this paragraph is vague.	There is already various opinions on what defines a Seat Cushion. This is only exacerbated by this paragraph which speaks of padded dress covers, but not plain dress covers. The argument has been made by co-workers that the cushion is the pad and replacing a non-padded dress covering would not change the TSO.	Seat cushions and covers that used modified materials (e.g. material changes, manufacturing process changes, additions to or modifications of padded dress covers, or modified buildups of identical materials) require substantiation because of the possible increase on pelvic and lumbar column compressive loading, belt loading under the downward and forward combined loading test and evaluation for submarining of the occupant.	Editorial	Accepted and made the requested change.
2	Approval of Modified Seating Systems Initially Approved under a Technical Standard Order	5	8.1.4	Second sentence of this paragraph is vague.	The wording of this sentence might possible lead the reader to conclude the TSOA/LODA Holder's responsibility applies to any design change for the life of the article, including those made after installation.	The second sentence, which starts, "Similarly, it is the TC/STC holder's responsibility..." should be a stand alone paragraph to minimize confusion	Format	Not Accepted We agree with the intended interpretation of the comment. However, we call out the rule in part 21 that clearly defines the responsibility of the the TSOA/LODA holder.
Comments Submitted By:		Steven J. Hooper						
Organization:								
Phone:		315-269-6970, ext 202						
#	Document Name	Page Number	Paragraph Number	Referenced Text	Comment/Rationale or Question	Proposed Resolution	Comment Type (Conceptual, Editorial, or Format)	Disposition/Response to Comment
1	AC 21-25B	general		The Marking requirments previously required by AC 21-25A Section 5.a.(6) have been removed from AC 21-25A Draft.	The currently required marking requirements provide very useful information to operators, maintainers modified seats as well as purchasers of used seats. Modified, but unmarked, seats will create a lot of confusion which is easily avoided by continuing to mark the seats with "Who modified the seat" and "When was it modified."	Retain the Marking Requirements in the revised AC.	Conceptual	Accepted. This section was removed because it is discussed in AC 21-46. The background section of this document was updated to make it clear that this AC is intended to be a supplement to the guidance contained in AC 21-46 and AC 21-50. However, we did add some seat specific guidance for marking in section 8.2.4.
2	AC 21-25B	9	8.2.2.2	... small aircraft seats	The phrase in ambiguous as can either be read to refer to seats for "small aircraft," or "small seats" for aircraft.	Rephrase the section by referring to seats for "General Aviation Aircraft."	Editorial	Accepted. Made the requested change.

Comments Submitted By:		Michael Brandt						
Organization:		Lifeport, Inc.						
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#	Document Name	Page Number	Paragraph Number	Referenced Text	Comment/Rationale or Question	Proposed Resolution	Comment Type (Conceptual, Editorial, or Format)	Disposition/Response to Comment
1	AC 21-25B	1	3	"As of its effective date, this AC cancels AC 21-25"	missing revision A after AC 21-25	add revision	editorial	Accepted. Made requested change.
2	AC 21-25B	5	8.1.2	"therefore, repairs and alterations based solely on compliance to TSO article requirements are not appropriate."	Word choice preference - suggest using "sufficient" instead of "appropriate"	therefore, repairs and alterations based solely on compliance to TSO article requirements are not sufficient.	editorial	Accepted. Made the requested change.
3	AC 21-25B	6	8.2	n/a	In this section, or in a subsection such as 8.2.1.2, this document should make reference to AC25.562-1B. While this is specific to just part 25 aircraft, the information contained in this document is thorough and is often used for guidance on other seat types in the absence of other specific guidance for that seat type.	In section 8.2.1.2, add the statement: "Additional guidance on seat testing and modifications can be found in AC 25.562-1. While this document is specific to part 25 seating, much of the guidance has been found helpful when testing and modifying all seat types."	conceptual	Not Accepted. There are different advisory documents for Part 23, 25, 27, and 29, (e.g. AC 23.562, AC 27-1, AC 29-2) and some of the guidance is different than found in AC 25.562.
4	AC 21-25B	8	8.2.1.2.2	"Restraints are approved according to TSO-C22 or TSO-C114 are only....."	typo in the first sentence (extra "are")	Suggest: "Restraints approved according to TSO-C22 or TSO-C114 are only....."	editorial	Accepted. Made the suggested change.
5	AC 21-25B	8	8.2.1.2.2	"For example, changes such as using a different weave of the same webbing material (such as nylon) may alter the stiffness, strength and dynamic performance of the seating system, which in turn..."	Sentence structure preference	Suggest: "For example, changing the weave pattern of the webbing (but still using the same webbing material, such as nylon) may alter the stiffness, strength, and dynamic performance of the seating system, which in turn...."	editorial	Partially Accepted. Changed sentence to read "Restraints are substantiated dynamically as part of the dynamic tests for the seating system. Therefore, restraint changes to the webbing material, manufacturing process, stitching, or hardware must be substantiated due to the potential impact to the occupant response and structural loading. For example, changing the weave pattern of identical webbing material may alter the stiffness, strength and dynamic performance of the seating system, which in turn may impact compliance to requirements such as HIC, occupant restraint load limits, and retention of the occupant. "

6	AC 21-25B	9	8.2.3	n/a	This discussion on the IIL might cause some ambiguity in the future between installers and TSO holders when an installer makes a change to a seat. The installer may incorrectly assume that the installer's modification requires the TSO holder to change the IIL.	add: "The TSO IIL document is revised only when the modification is performed under the TSOA by the TSOA/LODA holder."	editorial	Accepted. Made the suggested change.
7	AC 21-25B	10	n/a	Discussion about marking/identification of the modification was removed from the previous revision (section 6 of AC 21-25A).	Concerned that modifications to TSO articles by the installer will not be properly captured/identified on the seat. If a seat is modified by the installer, but no marking is added indicating this change, that seat could be installed into another aircraft for which the modification is not only unknown and unapproved, but may not be compatible with the new	Suggest: from AC21-25A, keep (6)(a), delete (6)(b) through (g). Then, add the following: (6)(x): "If an installer modifies the seat, the change must be approved and a modification placard added near the original TSO placard. The modifier's placard should be added without removing the original TSO placard only if the original manufacturer or the modifier can assure that the	conceptual	Partially Accepted. This section was removed because it is discussed in AC 21-46. The background section of this document was updated to make it clear that this AC is intended to be a supplement to the guidance contained in AC 21-46 and AC 21-50. However, we did add some seat specific guidance for marking in section 8.2.4.